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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/587,953

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Michael Roberts

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EXAMINER

MAPA, MICHAEL Y

ART UNIT

PAPER NUMBER

2617

MAIL DATE

DELIVERY MODE

03/16/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/587,953	<b>Applicant(s)</b> ROBERTS, MICHAEL	
	<b>Examiner</b> Michael Mapa	<b>Art Unit</b> 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 February 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Response to Amendment*

1. The applicant has amended the following:  
Claims 1—10 have been amended.

### *Response to Arguments*

2. Applicant's arguments filed 02/09/09 have been fully considered but they are not persuasive.

With regards to applicants arguments that Yoshii fails to disclose “defining a second criterion representing a distance between the broadcast source and the mobile terminals for using a shared channel in said geographic zone and for which a reception of the broadcast service is optimal.” The examiner respectfully disagrees. Yoshii discloses “defining a second criterion representing a distance between the broadcast source and the mobile terminals for using a shared channel in said geographic zone and for which a reception of the broadcast service is optimal” **(Paragraphs [0004] & [0008] of Yoshii, wherein Yoshii discloses that in MBMS all the mobile stations receive the information using the same channel as well as disclosing dividing transmission rates and reception quality hierarchically according to their distances from the base station, therefore a second criterion representing a distance between the source and mobile terminals for using a shared channel in said geographic zone).**

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "the case where the mobile stations have to initiate connection to signal the fact that they lie on the cell boundary which would be trivial for a shared channel in a geographic zone") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

With regards to applicants arguments that Chuah fails to suggest or disclose "fixing a percentage of mobile terminals that should receive the MBMS service". The examiner respectfully disagrees. Chuah discloses "fixing a percentage of mobile terminals that should receive the MBMS service" (Paragraph [0026] of Chuah, wherein Chuah discloses  $(N - m)$  users that will be supported by a first transmission scheme and  $m$  users that will be supported via a second transmission scheme, therefore a percentage of the total mobile terminals will receive the MBMS service via a first transmission scheme and a percentage of the total mobile terminals will receive the MBMS service via a second transmission scheme).

With regards to the applicants arguments that Chuah in view of Yoshii fails to disclose a "minimum level of received signal code power (RSCP) measured by code indicated by said cellular telecommunication network". The examiner respectfully disagrees. Chuah in view of Yoshii discloses "minimum level of received signal code power (RSCP) measured by code indicated by said cellular telecommunication network" (Paragraphs [0023] & [0004] of Chuah, wherein Chuah discloses measuring the

Art Unit: 2617

received pilot signal power and continues to disclose a CDMA system, therefore measured by code indicated by said cellular telecommunication network).

***112 6<sup>th</sup> Paragraph***

3. The applicant seems to be invoking the 112 6<sup>th</sup> Paragraph for claim 9, Page 8 in the response sent on 02/09/09. The examiner takes note of the invocation of the 112 6<sup>th</sup> paragraph, however the specification seems to be providing just a general “means for establishing connection” and is the same means present in the prior art references provided. Therefore, the examiner maintains the rejection as stated below and would like to requests the applicant to point out the specific means indicated on the response sent on 02/09/09.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-6, and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chuah et al. (US Patent Publication 2005/0085254 herein after referenced as

Art Unit: 2617

Chuah) in view of Yoshii et al. (US Patent Publication 2005/0164740 herein after referenced as Yoshii).

Regarding claim 1, Chuah discloses “An optimization process for radio resources allocated to an MBMS service (Multimedia Broadcast/Multicast Service) broadcast by a source to a group of mobile terminals located in a limited geographic zone that is covered by at least one cellular telecommunication network” **(Fig. 4 & Paragraphs [0017] & [0020] of Chuah, wherein Chuah discloses a cellular network with a group of mobile terminals within coverage of the base station and using MBMS service and increasing cost savings and reducing power requirements)**. Chuah discloses “comprising: counting the mobile terminals present in said geographic zone” **(Fig. 3 & Paragraph [0026] of Chuah)**. Chuah discloses “defining a first criterion representing a minimum level of reception quality by the mobile terminals of the service broadcast in said geographic zone” **(Fig. 3 & Paragraph [0024] of Chuah)**. Chuah discloses “establishing a signalization connection between the cellular telecommunication network and mobile terminals located in a broadcast zone that fulfill the first criteria and transmitting the MBMS service to said mobile terminals” **(Fig. 3 & Paragraph [0026] of Chuah)**.

Chuah fails to disclose “defining a second criterion representing a distance between the broadcast source and the mobile terminals for using a shared channel in said geographic zone and for which a reception of the broadcast service is optimal.”

In a related field of endeavor, Yoshii discloses “defining a second criterion representing a distance between the broadcast source and the mobile terminals for using a shared channel in said geographic zone and for which a reception of the broadcast service is optimal” **(Paragraphs [0004] & [0008] of Yoshii, wherein Yoshii discloses that in MBMS all the mobile stations receive the information using the same channel as well as disclosing dividing transmission rates and reception quality hierarchically according to their distances from the base station, therefore a second criterion representing a distance between the source and mobile terminals for using a shared channel in said geographic zone).**

Therefore it would have been obvious for one of ordinary skill in the art to modify the invention of Chuah to incorporate the features and teachings of Yoshii for the purpose of improving the network by providing appropriate quality control over each mobile station in an MBMS **(Paragraph [0006] of Yoshii)** and providing services at a high transmission rate and high quality for mobile stations located near the base station and low transmission rate and low quality for mobile stations located farther from the base station and nearer the cell boundary **(Paragraph [0008] of Yoshii).**

Regarding claim 2, Chuah in view of Yoshii discloses “A process according to claim 1, wherein said signalization connection is used to count the mobile terminals of a broadcast zone” **(Paragraph [0026] of Chuah).**

Regarding claim 3, Chuah in view of Yoshii discloses “The process according to claim 2, wherein the process further comprises: fixing a percentage of mobile terminals that should receive the MBMS service” **(Paragraph [0026] of Chuah, wherein Chuah**

Art Unit: 2617

discloses ( $N - m$ ) users that will be supported by a first transmission scheme and  $m$  users that will be supported via a second transmission scheme). Chuah in view of Yoshii discloses “broadcasting signals having a determined power level” (**Paragraph [0023] of Chuah, wherein Chuah discloses broadcasting to all multicast users within a given cell coverage area**). Chuah in view of Yoshii discloses “determining the percentage of mobile terminals that respond to signals that have been broadcast” (**Paragraph [0024] of Chuah**). Chuah in view of Yoshii discloses “as long as a fixed percentage of mobile terminals has not been reached, reducing an emission power level; and if the fixed percentage of mobile terminals has been reached, broadcasting the MBMS service at the emission power level that has been reached” (**Paragraph [0026] of Chuah, wherein Chuah discloses  $N$ - $m$  users (fixed percentage of mobile terminals) using a first transmission scheme and  $m$  users using a second transmission scheme. The first transmission scheme broadcast is less than the initial broadcast to all multicast users within the cell coverage area, therefore a reduction of emission power level**).

Regarding claim 4, Chuah in view of Yoshii discloses “The process according to claim 1, wherein said cellular telecommunication network is a UMTS network” (**Paragraph [0020] of Chuah, wherein Chuah discloses UTRAN (UMTS Radio Access Network)**).

Regarding claim 5, Chuah in view of Yoshii discloses “The process according to claim 4, wherein the first criterion that represents the minimum level of reception quality is determined according to a minimum level of received signal code power (RSCP)



Art Unit: 2617

measured by code indicated by said cellular telecommunication network” (**Paragraphs [0023] & [0004] of Chuah, wherein Chuah discloses measuring the received pilot signal power and continues to disclose a CDMA system, therefore measured by code indicated by said cellular telecommunication network).**

Regarding claim 6, Chuah in view of Yoshii discloses “The process according to claim 4, wherein the first criterion that represents the minimum level of reception quality is determined according to a signal-to-noise ratio  $E_c/N_0$  that is indicated by said cellular telecommunication network” (**Paragraph [0022] of Chuah, wherein Chuah discloses the broadcast threshold to be a ratio of the signal power to the interference power and noise density).**

Regarding claim 9, Chuah discloses “A mobile terminal aimed at receiving an MBMS service broadcast by a source in a limited geographic zone that is covered by at least one cellular telecommunication network” (**Fig. 4 & Paragraph [0020] of Chuah, wherein Chuah discloses a cellular network with a group of mobile terminals within coverage of the base station and using MBMS services).** Chuah discloses “comprising: means for establishing connections with said cellular telecommunication network in the cases: in which a reception quality level is below a minimum level defined by said cellular telecommunication network for said zone” (**Fig. 3 & Paragraphs [0024] & [0026] of Chuah, wherein Chuah discloses determining the number of users below the established broadcast threshold and using separate transmission schemes for users below the established threshold).**

Chuah fails to disclose “comprising: means for establishing connections with said cellular telecommunication network in the cases: in which a distance between the mobile terminal and the broadcast source is greater than a distance established in advance by said cellular telecommunication network.”

In a related field of endeavor, Yoshii discloses “comprising: means for establishing connections with said cellular telecommunication network in the cases: in which a distance between the mobile terminal and the broadcast source is greater than a distance established in advance by said cellular telecommunication network”

**(Paragraph [0008] of Yoshii, wherein Yoshii discloses dividing transmission rates and reception quality hierarchically according to their distances from the base station).**

Therefore it would have been obvious for one of ordinary skill in the art to modify the invention of Chuah to incorporate the features and teachings of Yoshii for the purpose of improving the network by providing appropriate quality control over each mobile station in an MBMS **(Paragraph [0006] of Yoshii)** and providing services at a high transmission rate and high quality for mobile stations located near the base station and low transmission rate and low quality for mobile stations located farther from the base station and nearer the cell boundary **(Paragraph [0008] of Yoshii).**

Regarding claim 10, Chuah in view of Yoshii discloses “The mobile terminal according to claim 9, wherein the mobile terminal establishes a connection with said cellular telecommunication network when a signal-to-noise  $E_c/N_0$  is lower than a level that has been set in advance by said cellular telecommunication network” **(Fig. 3 &**

Art Unit: 2617

**Paragraphs [0022], [0024] & [0026] of Chuah, wherein Chuah discloses the broadcast threshold to be a ratio of the signal power to the interference power and noise density, and continues to disclose determining the users below the broadcast threshold and using a second transmission scheme for the users below the broadcast threshold).**

6. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chuah et al. (US Patent Publication 2005/0085254 herein after referenced as Chuah) in view of Yoshii et al. (US Patent Publication 2005/0164740 herein after referenced as Yoshii) and further in view of Lee et al. (US Patent Publication 2004/0146041 herein after referenced as Lee).

Regarding claim 7, Chuah in view of Yoshii discloses “The process according to claim 1.” Chuah in view of Yoshii fails to disclose “wherein said cellular telecommunication network is a GSM/GPRS network.”

In a related field of endeavor, Lee discloses “wherein said cellular telecommunication network is a GSM/GPRS network” **(Paragraph [0005] of Lee, wherein Lee discloses the UMTS as having been evolved from GSM and is used as the European Standard).**

Therefore it would have been obvious for one of ordinary skill in the art to modify the invention of Chuah in view of Yoshii to incorporate the teachings of Lee of having a

Art Unit: 2617

GSM standard for the purpose of increasing marketability by conforming to known standards.

Regarding claim 8, Chuah in view of Yoshii and further in view of Lee discloses “The process according to claim 7, wherein the first criterion that represents the minimum level of reception quality is determined according to a parameter (RX lev GSM)” **(Paragraph [0023] of Chuah, wherein Chuah discloses measuring the received signal power).**

### ***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Mapa whose telephone number is (571)270-

Art Unit: 2617

5540. The examiner can normally be reached on MONDAY TO THURSDAY 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nick Corsaro can be reached on (571)272-7876. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael Mapa/  
Examiner, Art Unit 2617

/NICK CORSARO/  
Supervisory Patent Examiner, Art Unit 2617

Application/Control Number: 10/587,953  
Art Unit: 2617

Page 13